

PREFACE

This document contains the written comments of the Bonneville Power Administration (BPA) on proposed amendments to the Columbia River Basin Fish and Wildlife Program as contained in the Northwest Power Planning Council's Draft Amendment Document (DAD) dated September 1, 1986. These comments supplement the oral testimony delivered on BPA's behalf by John Palensky at the Council's public hearing on October 8, 1986, in Portland, Oregon. BPA has made every effort to conform its comments to the instructions issued by the Council, and has proposed alternative language wherever appropriate.

TABLE OF CONTENTS

	Page
Preface	i
Comments on Proposed Adoption Language	
Section200	1
Section300	19
Section400	26
Section500	29
Section700	33
Section800	39
Section 1000	50
Section 1400	56
Section 1500	57
Technical Appendix 1	84

SECTION 200

MEASURE: 201

Suggested Language:

Paragraph 1, accept as written.

(Paragraph 2) From the beginning, the Council has been aware that any statement of total losses and of hydropower responsibility for those systemwide salmon and steelhead losses likely would call for a judgment which could be informed by the best available data, ~~but not driven by data. Reliable data are scarce for the era prior to the major development of the basin that severely reduced fish runs (pre-1850).~~ More recent data are plentiful, but often are not expressed in a way that enables unequivocal comparative judgments (e.g., among fishing efforts, timber harvest and trends in fish runs). As a result, more than one reasonable interpretation of the available data can be made. After an intensive review of the available data, the Council believes the data reasonably support the following broad conclusions regarding salmon and steelhead losses:

Discussion:

It is possible and preferable to estimate loss in salmon productivity using an analysis comparing existing anadromous fish productivity with the hydroelectric system to the productivity that would exist without the hydroelectric purposes and features of dams on the Columbia River and its tributaries. Such an approach is not dependent upon nonexistent historical data.

MEASURE: 201(a)-(b)

Suggested Language: Accept as written.

MEASURE: 201(c)

Suggested Language:

.. After the last sentence in the first paragraph, add:

Unfortunately, these losses of stream miles do not provide a foundation for estimates of productivity losses because of variability in productivity between upriver and lower river tributaries.

Discussion:

This sentence is needed to clarify that basin-wide stream miles, without estimates of fish productivity per mile, cannot be used to indicate loss in productivity.

MEASURE: 201(d)

Suggested Language:

Accept as written, and add one sentence to the end, as follows:

The hydroelectric system shares responsibility for losses in fish productivity due to inundated and blocked habitat and losses of migrating fish caused by dams.

Discussion:

There is a need to clarify that the hydropower system shares responsibility with other purposes of the dams for the loss in fish productivity caused by dams.

MEASURE: 202

Discussion:

BPA is reserving comment on this subsection. We believe the quality of available evidence is adequate to support only an interim objective. We believe that a supportable estimate of the loss attributable to major components of the hydropower system can be developed from contemporary data. We are continuing our efforts to develop an analytical and empirically sound basis for a determination of the extent of BPA's share of responsibility to protect, mitigate, and enhance anadromous fish.

MEASURE: 203

Suggested Language:

BPA's comments on Measure 203 are contained in a letter, dated December 15, 1986, to Ms. Janis Carpenter, responding to the Council's staff issue paper: Salmon and Steelhead System Objectives and Policies.

MEASURE: 204(a); (c)(4); (e) [Council's December 1, 1986, Language]

Suggested Language:

- (a) The Council will fund the fish and wildlife agencies and tribes to develop coordinated subbasin plans consistent with the system objective and policies described in section 203, for production of salmon and steelhead in each major salmon and steelhead producing subbasin in the Columbia River Basin. The subbasin plans shall identify production objectives, including priorities among anadromous fish stocks and geographic areas of emphasis. The fish and wildlife agencies and tribes also will be expected to provide funding or other support for the planning process.
- (c)(4) State biologically sound objectives that reflect the system objective and policies (section 203), set priorities among anadromous fish stocks and geographic areas of emphasis, complement and are consistent with objectives for other subbasins.
- (e) Prior to funding the fish and wildlife agencies and tribes to develop subbasin plans, the roles and responsibilities of all participants in the subbasin planning process will be established. Participants in subbasin planning will develop a process to guide development of subbasin plans consistent with their defined roles and responsibilities.

Discussion:

On December 1, 1986, the Council staff transmitted to interested parties, revised language for Section 203, 204, and 1504 of the DAD. BPA comments and suggested language revisions have been made to the December 1 revisions.

BPA's comments are twofold. First, we believe the Council needs to strengthen language in the DAD requiring the fish and wildlife agencies and Tribes to establish subbasin production objectives and priorities for enhancement among anadromous fish stocks, by geographic area of emphasis. We understand that this is the intent of the language, but believe that this cornerstone of system planning must be explicit. Production objectives, by subbasin, provide the measure by which the Council is able to guide the adoption of mitigation measures to reach basinwide production objectives. Establishment of production objectives including priorities among anadromous fish stocks by geographic area of emphasis would allow for testing of subbasin production objectives, and the alternatives available to achieve them, against system policies and constraints, and it would allow prioritization of projects among subbasins to guide BPA and others as they implement the Program.

The second comment we make with regard to Section 204 of the DAD addresses the process by which subbasin plans are developed and the roles played by the various participants in the Program. After

analysis of Section 203, 204, and 205, we concluded that the framework for a much needed system planning process has been woven into the DAD. However, the identification of the roles to be played by participants was not clarified. In consultations with the Council, we suggested language revisions which would clarify the roles of participants in the subbasin planning process. Essentially, our revisions recognized the fish and wildlife agencies and tribes as the proper entities to recommend systemwide and subbasin production objectives including priorities among anadromous fish stocks. Further, our revisions clarified the role of BPA, the utilities, and others as participants in formulating mitigation plans as part of the subbasin planning process. It was our view then, and it continues to be our view, that this level of clarification of roles is needed if the system planning framework is to succeed.

The Council, in the previously mentioned consultations, questioned whether it was necessary or appropriate for the Program to give explicit instruction on process for Program implementation, particularly where such process would require further refinement. We understand this concern and agree that specific instruction as we originally suggested may not be in the interest of such a dynamic effort as that envisioned in the Section 200. However, the issue of participants' roles still exists. The Council suggested that prior to contracting for development of subbasin plans pursuant to Section 204(a) of the DAD, it would be appropriate to establish, through a collaborative process, the roles and responsibilities of the

participants in subbasin planning. Accordingly, we have suggested the new language above and an amendment to Action Item 36.02 in Section 1504 to convey this expectation.

With regard to the collaborative development of a process to guide implementation of Section 200. BPA agreed that such an effort was appropriate and encouraged the Council to hold a consultation for this purpose. The Council was not able to convene such a meeting. However, the fish and wildlife agencies and tribes held such a meeting on December 12 to pursue the collaborative development of an implementation process for Section 205. BPA attended and actively participated in this meeting. We understand that the agencies and tribes will be submitting to the Council, as part of their comments on the DAD, a revision of Section 205 which reflects discussions held at the December 12 meeting. For the most part, BPA agrees with what is to be provided to the Council by the agencies and tribes. However, because agreement was not reached on several important areas of the collaboratively developed implementation process for Section 205, we can not fully endorse the document as it is now written. Consequently, we will be providing a copy of the revised Section 205 with areas of disagreement highlighted and alternative approaches suggested. It is also our intent to continue to work with the agencies and tribes to overcome the remaining areas of disagreement.

MEASURE: 205(a)

Suggested Language: Accept as written.

Discussion:

Availability of research fish has been a recurring impediment to implementation in several areas of the Program. The Council can take steps to alleviate this problem.

MEASURE: 205(b)(1)

Suggested Language:

- (1) Salmon and steelhead research under this program should be designed to reduce scientific uncertainty and ~~increase-~~
~~knowledge~~ to achieve the salmon and steelhead enhancement objectives of the program, and directly apply to the biological and management needs of the Columbia River Basin.

Discussion:

Salmon and steelhead research done under program auspices should be planned with program goals in mind. Program language should clearly state the expectation that research results are intended to aid a management decision or solve a biological problem and contribute to the production of fish and wildlife needed to mitigate the effects of the hydropower system.

MEASURE: 205(b)(2)-(3)

Suggested Language: Accept as written.

MEASURE: 205(b)(4)

Suggested language:

- (4) Knowledge gained as a result of the research program should be reviewed and evaluated in a central policy forum and used by ~~made-available-to~~ policy makers, resource managers, biologists, and hydroelectric project operators and regulators in a timely manner.

Discussion:

To “make available” does not necessarily result in use by resource managers, biologists, and hydroelectric project operators and regulators. If the Council expects research funded under the program to be properly designed and the results used, then the program should clearly state this intention.

MEASURE: 205(b)(5)-(7)

Suggested Language: Accept as written.

MEASURE: 205(c)(1)

Suggested Language:

- (1) Bonneville shall convene, fund, and facilitate technical work groups containing representatives from the fisheries agencies, tribes and hydropower project operators to aid in the development of five-year work plans for each of the areas listed below. Each work plan must include objectives, tasks, and schedules, including major milestones and check points, and estimated costs. To the extent appropriate, they should incorporate work planning previously conducted in each area, for example, the hatchery research plan and supplementation work plan produced by Bonneville, the fish and wildlife agencies and tribes. The work plans also will identify test fish needs and how those needs will be met. Members of a work group should have technical expertise in the research area. The fish and wildlife agencies shall provide test fish for research work plans developed by the work groups. The reservoir mortality/ Water Budget work group shall include representatives of the Fish Passage Center. The Council will review the work plans as a package prior to their funding by Bonneville.

Discussion:

Bonneville agrees with the concept of the technical work groups. The inclusion of language calling for the formation and operation of these groups formalizes an activity that BPA has pursued throughout Program implementation. However, the language calling for the formation of work groups needs to be strengthened to include clear guidance to Bonneville, the fish and wildlife agencies, and tribes that the Council expects BPA to convene the groups, fund the necessary activities, and insure that work products are forthcoming.

Bonneville has and will continue to fund work groups as a necessary part of implementation. The Council could aid the BPA efforts by full articulation of expected and necessary BPA activities, responsibilities, and authorities.

The technical work groups concerned with hatchery effectiveness and supplementation should find the existing research plans appropriate for incorporation in their efforts. Considerable effort and ratepayer funds went into the development of the hatchery research plan and the supplementation work plans. These documents identified a rationale and strategy for hatchery research and developed scopes of projects necessary to address the major problems affecting artificial production and supplementation. The Action Item 39.2 research moratorium brought progress in these areas to a temporary halt. The new work groups should capitalize on the past efforts and revisit these specific documents as a first effort.

Research and evaluations identified and designed by the work groups must not be impeded by the unavailability of test fish. It is appropriate for the Council to call for correction of this long standing problem. Work group participants will be representatives of the agencies producing the test fish. Coordination of research needs for test organisms and production schedules should not be a significant problem but should be clearly stated as an expectation of the Council.

MEASURE: 205(c)(1)(A)

Suggested Language:

- (A) Solving disease problems affecting ~~spring and summer chinook~~
anadromous fish.

Hatchery production of upriver spring chinook has been seriously hampered by the prevalence of ~~bacterial kidney~~ disease (~~BKD~~). ~~This~~ disease must be controlled or other enhancement efforts, such as improved passage, transportation, and flows augmentation will be undermined. See program section 205(c) and (d), 404(b)(17), and 704(h)(2)(D).

Discussion:

The draft language makes bacterial kidney disease (BKD) sound as though it is the only disease impacting chinook salmon and that it is unique to chinook salmon. BKD may have a greater impact on chinook but is not limited to that species, and several diseases have equally important impacts on chinook.

Hainstem passage of downstream migrants can be improved through the Water Budget, spill and bypass, and transportation. Recent studies have indicated that disease problems can mask the benefits gained through transportation or flow augmentation. Specific program language recognition of this will enhance BPA's ability to fund research to address the effects of disease on the success of flow augmentation and transportation.

MEASURE: 205(c)(1)(B)

Suggested Language:

- (B) Exploring methods for substantially increasing and improving hatchery production at existing hatcheries within the next ten years.

It has been estimated that production at existing hatcheries could be increased substantially. Before the Council can assess adequately the need for new hatcheries, it must have a better understanding of the potential at existing hatcheries. See program sections 704(f) and (h).

Discussion:

The hatchery survey called for by Measure 704(f) is only one Program source of information regarding existing hatchery production.

The group of measures included in 704(h) address the full spectrum of hatchery practices and environment which affect hatchery production. Exploring methods for increasing hatchery production should be comprehensive, e.g., see BPA's "Proposed Plans for Qualitatively and Quantitatively Improving Artificial Propagation of Anadromous Salmonids." BPA urges measure reference to the Program component enabling implementation to improve hatchery production, i.e., 704(h).

MEASURE: 205(c)(1)(C)

Suggested language :

Supplementation is a technique proposed for quickly rebuilding natural runs. It involves planting hatchery fry, ~~and~~ juveniles, or adults in the natural environment. However, documentation on ~~of-successful~~ supplementation efforts is minimal, and previous ~~experiments~~ have shown that, if proper attention is not paid to stock selection, timing of release and other factors, supplementation easily can fail, can have a serious impact on wild/natural populations, or can have both of these results.

Discussion:

Documentation related to supplementation research should include not only the successful efforts but also the failures and the reasons why a project succeeded or failed. The impact on wild/natural populations should be emphasized.

MEASURE 205(c)(1)(D)

Suggested Language: Accept as written.

MEASURE: 205(c)(2)(A)-(C)

Suggested Language :

- (2) Bonneville shall convene, fund, and facilitate the technical work groups to participate in the ongoing review and implementation of the five-year work plans. Specifically, the groups will:

- (A) Develop statistical and design standards for research in the areas of emphasis.
- (B) Assist in developing, reviewing and evaluating requests for proposals, project work statements, and other related documents.
- (C) Continue to provide an annual summary of the status of research in each area of emphasis, including an analysis of the extent to which research objectives have been achieved, ~~and-of-any~~ new problem areas ~~that~~ have been identified, and management applications have been addressed.

Discussion:

Bonneville agrees with the concept of the technical work groups. The inclusion of language calling for the formation and operation of these groups formalizes an activity that BPA has pursued since the adoption of the Program. However, the language calling for the formation of work groups needs to be strengthened to clearly indicate that the Council expects BPA to convene the groups, fund the necessary activities, and insure that work products are forthcoming. Bonneville has and will continue to fund work groups as a necessary part of implementation. The Council could aid the BPA efforts by full articulation of expected and necessary BPA activities, responsibilities, and authorities.

The proposed language to develop an annual **summary** of research status describes an activity similar to one which has been conducted by BPA in the past. **BPA's** Annual Project Review has provided an open forum

for peer interchange regarding technical matters, research, and habitat enhancement materials and methods. The addition of "management applications" to the DAD language is urged as a means of promoting the institutionalization of research results funded by the program.

Although BPA has held an annual project review each of the past three years, BPA does not plan to hold a meeting this year. Many ongoing projects have already been reviewed one or more times. BPA has concluded there is insufficient new material to warrant convening the meeting in 1987. However, with the addition of **subbasin** planning, Technical Work Groups, and System Monitoring and Evaluation Work Group to the Program, and the removal of the research moratorium from the Program, BPA anticipates the development of ample material for a review meeting in 1988. Adding consideration of management applications has been **recommended** by the expert review panels assembled by BPA at past meetings. BPA anticipates adding the subject of management application to the agenda of future meetings.

MEASURE: 205(d)(1)-(2)

Suggested Language:

- (1) The Corps will continue to develop five-year work plans as part of its Fish Passage Development and Evaluation Program and coordinate with the BPA Technical Work Groups.
- (2) Accept as written.

Discussion:

The Corps and BPA will be working together on a mutual research review process regarding **mainstem** passage issues. It is appropriate for both implementing agencies to fully coordinate all other research areas of the Program which they have in **common**, such as hatchery effectiveness, fish disease and **smolt** quality. This is in the interest of the Program and systemwide implementation effectiveness.

MEASURE: 205(e)

Suggested language: Accept as written.

MEASURE: 205(f)

Suggested Language: Accept as written.

MEASURE: 205(f)(1)

Suggested language:

Bonneville shall fund collection of Columbia River Basin hatchery data for anadromous fish. Data to be collected , format, and schedules on a-yearly-basis shall be determined by the Hatchery Effectiveness Technical Work Group working in conjunction with the System Monitoring and Evaluation Work Group. These data will include: counts of returning adults; disposition of returning adults; source and description of brood stock; actions taken to maintain genetic diversity and size, location, and time of release of juvenile fish.

Discussion:

BPA supports the development of a hatchery data base for anadromous fish. Considering measure language calling for formation of a Hatchery Effectiveness Technical Work Group and a System Monitoring and Evaluation, BPA suggests it is appropriate to identify the planning entities with the technical expertise to refine the data base requirements.

MEASURE: 205(f)(2)

Suggested Language: Accept as written.

MEASURE: 206

Suggested Language: Accept as written.

Discussion:

BPA supports the criteria for resident fish substitution project selection. These criteria should all be rigorously applied by the Council before approval of projects. When the Council cannot reconcile all of the criteria with the information supplied by the project sponsor, then the Council should direct the sponsor to develop all the needed information to satisfy the criteria.

SECTION 300

MEASURE: 304(a)(1);(1)(A)-(D)

Suggested Language: Accept as written.

MEASURE: 304(a)(1)(E)

Suggested Language:

Throughout the April 15 to June 15 period, the Corps, Bonneville and the Bureau of Reclamation shall provide average weekend flows (including Memorial Day) at Priest Rapids and Lower Granite dams which are no lower than 80 percent of the average of the preceding five weekday flows, if a Water Budget flow request is in effect.
~~unless otherwise authorized in writing by the fish passage managers.~~

Discussion:

BPA has agreed to weekend flow protection when a Water Budget request is in effect, pending research results on the effects of flow fluctuations on **smolt** migration. Requiring weekend flow protection on all weekends during the water budget period limits BPA's ability to maximize system flexibility for power production. BPA believes weekend flow protection is not warranted unless a Water Budget request, indicating significant number of fish are migrating, is in effect.

MEASURE: 304(a)(2)-(3); (7)

Suggested Language: Accept as written.

MEASURE: 304(b)(1)

Suggested Language:

Bonneville shall fund the ~~establishment and~~ operation of a the fish passage center, including funds for two fish passage managers positions, two biologists, and one secretary. ~~technical support, the services of consultants when necessary and clerical staff for the fish passage managers~~ This support will assist the fish passage managers in: (A) ~~researching and implementing the annual smolt monitoring programs called for in section 304(d)(2) consistent with the research policies specified in section 205;~~ (B) developing and implementing flow and spill operational requests; ~~(C) analysing research, monitoring results, and preparing draft and final reports.~~ (B) preparing a report and issuing it by November 1, annually. This report shall be that specified in sections 304(c)(3) and 1504, action item 33.3, of the Council's Fish and Wildlife Program; and (C) preparing a research and monitoring plan by December 1 of each year, noting the availability of test fish, as provided in section 1504, action item 33.3.

Discussion:

BPA and the fishery agencies and Tribes are negotiating the roles, responsibilities, funding, duties, and deliverables of the Water Budget Managers according to the current Program. BPA is agreeing to initiate 1987 contracts which will include the following:

- (1) Funding of the Water Budget Managers, two biologists, one secretary, and one part time Fish Marking Coordinator
- (2) Funding for those elements needed to support the managers to develop and implement spill and flow requests, identify applicable portions of the smolt monitoring program, review the results of the monitoring program, and develop those reports as required in the Program.
- (3) Managers will identify those sites, dates, and other aspects of monitoring needed to request flows. and spills that year (real time operational decisions). Neither the Water Budget Managers nor staff will be in the role of conducting and designing research, or supervising personnel who design and conduct research. Bonneville assumes all Water Budget and **mainstem** passage research matters will be handled by the appropriate Technical Work Group.

BPA has maintained the draft language to include two Fish Passage managers. BPA believes there is no longer a need for two managers. If the Council concludes that a single manager is sufficient, our **recommended** language on this section referencing the managers would become singular.

When the Program started, two managers were deemed necessary because of the different viewpoints between the agencies and Tribes. To date, BPA has seen no evidence that supports the need for two managers. The agencies and Tribes have resolved all policy issues

internally and have presented coordinated Water Budget requests and spill ~~communications~~ to the Council and the hydrosystem operators. The agencies and Tribes are also forming the Columbia Basin Fish and Wildlife Authority, which will substantially benefit the clarity of the agencies and Tribal policy to the Water Budget Managers. The need for two ~~managers~~ has therefore been eliminated. BPA estimates cost savings to be \$95,000 annually.

MEASURE: 304(b)(2)

Suggested Language:

- (2) The Fish Passage Center will house the fish passage managers and their staff and will function as the primary center for requesting Water Budget flows and developing spill requests. The data needed for the development of these requests will be contracted for by BPA and made available to all parties, including the managers. ~~housing data and information regarding juvenile fish passage--All data collected and stored at the Fish Passage Center will be available upon request to all interested parties.~~

Discussion:

BPA rejects 304(b)(2) because it places the Fish Passage Data Information System (FPDIS) under the Water Budget Managers and in the Fish Passage Center. BPA has encountered data availability problems and de-facto management by the Water Budget Managers since the FPDIS first started. BPA's contract with NMFS in 1986 was expected to

resolve the issue, by providing a clear separation between the managers and the data system. That contract failed to provide the necessary assurances of separation between the data system and the managers. BPA will be contracting with the U.S. Fish and Wildlife Service in 1987 in order to provide the region with a neutral, impartial, open access data system. BPA believes the FPDIS can be located anywhere, but should be managed independently by a disinterested party. The Fish Passage Center should have only the managers and staff (two biologists and one secretary) associated with Water Budget and spill program management.

MEASURE: 304(b)(3)-(5)

Suggested language: Accept as written.

MEASURE: 304(c)(3)(A)-(D)

Suggested Language: Accept as written.

MEASURE: 304(c)(3)(E)

Suggested Language:

(E) An assessment of juvenile fish passage conditions which occurred that year, including the general effect of program measures implemented such as Water Budget, spill and juvenile fish facilities improvements, utilizing data generated by a variety of entities conducting research, who have been contracted by BPA and others.

Discussion:

We agree with need for element **(E)** in the managers report, but the element needs to be rewritten pursuant to recent negotiations between the fish agencies/Tribes and BPA regarding the Water Budget Managers. The report will be based upon data collected through research conducted by persons other than the managers or Fish Passage Center personnel. BPA will contract, for research to be conducted by entities other than the Water Budget Managers and staff.

MEASURE: 304(d)(1)

Suggested Language:

- (1) As part of its five-year research work plan on reservoir mortality and Water Budget effectiveness. Bonneville shall fund studies ~~e study~~ to gather additional evidence on the relationship among flows, spills, travel time, and smolt survival (see section 205(c)). These studies ~~This study~~ will include an analysis of the relationship between flows and survival of the ~~late-summer~~ migrating chinook stocks, which migrate during earlier life stages than the smolts that migrate in the spring. Based on the results of these studies ~~the study~~, the Council will determine whether the Water Budget is successful in achieving ~~smolt~~ survival and to what degree. Annually, it will review the operation of the Water Budget. Pursuant to section 1400, the Council will consider proposed alternatives to the Water Budget designed to be more effective in improving downstream migration or in reducing power system effects. Bonneville also shall include, in its five-year research work plan, investigations of spill ~~effectiveness,~~ ~~hourly-fish-passage-patterns,~~ and reservoir mortality at ~~mainstem federal~~ projects, in consultation with all interested parties. These studies shall be consistent with the research policies specified in section 205.

Discussion:

This is an extremely large and complex issue and it will not be comprised of one study, but rather, many studies. Many agencies will be involved with this research effort. The statement "hourly fish passage patterns" should be deleted, because this work (hydroacoustic monitoring) is funded by the COE, not BPA.

REJECTED AMENDMENT APPLICATIONS

MEASURE: 304(a)-(d)/CBFWC

Suggested Language: BPA supports the rejection.

MEASURE: 304(a)-(d)/CBFWC (REJECTED)

Suggested Language: BPA supports the rejection.

SECTION 400

MEASURE: 403

Suggested Language: Accept as written.

MEASURE: 404(b)(3); (4)(A); (8)(A); (9)(A); (13); (17)(A)-(C)

Suggested Language: Accept as written.

Discussion:

The spill and transport program is acceptable to BPA and reflects the results of careful scientific analysis and public comment facilitated by the Council in 1985-86.

BPA resubmits for Council consideration its comments of January 24, 1986, during the "fast-track" spill amendment process (attached). This data concluded that increasing spill quantities at dams without bypass facilities had very minimal, positive impact on

survival of juvenile fish migrating to below Bonneville Dam. BPA also suggested a very plausible hypothesis that transport is a very cost-effective bypass method for species, including spring chinook. The less than conclusive test results for spring chinook could be caused by an inherent disease problem with these fish that is not affected by hydroelectric operations and mitigation efforts.

Should the spill program be reviewed in the future, BPA would strongly urge review of the necessity for ~~summer~~ spills at Lower Monumental Dam. BPA investigated the need for ~~summer~~ spills to protect 80 percent of the Snake River fall chinook stock. BPA believes that the current and future fisheries management plan for these fish will likely not necessitate ~~summer~~ spill at Lower Monumental Dam.

REJECT/AMEND/REAPPLICATIONS

MEASURE: 403/404(b)/CBFWC and 1504/CBFWC (REJECTED)

Suggested Language: BPA supports the rejection.

MEASURE: 404(b)(17)/COE (REJECTED)

Suggested Language : BPA supports the rejection.

SECTION 500

MEASURE: 504(a)(1)

Suggested Language: Accept as written.

MEASURE: 504(c)(2)

Suggested Language: Omit Measure 504(c)(2) in its entirety.

Discussion:

BPA contributed funds to a study to perfect the electrophoresis technique to differentiate fish stocks and demonstrate its applicability in the Columbia River Basin (Project 79-001). BPA funded further application of this technique (Project 83-451) to determine separate stocks of Columbia Basin anadrowus fish. These efforts and those of the fishery management entities have resulted in a proven electrophoresis technique that is now applied widely in fisheries management. The technique may also soon be used to determine if sturgeon populations in the United States stretches of the Kootenai River are different from those in Canadian waters.

BPA therefore believes that further research to improve stock identification methods as part of a hydroelectric mitigation program is unnecessary. Stock identification is now a matter of prescriptive application. Measure 504(c)(2) has been accomplished and should be omitted from the Program.

MEASURE: 504(c)(3)

Suggested Language:

Omit Measure 504(c)(3) in its entirety and add the following to Measure 504(b)(1), which addresses consultations to ensure consistency with harvest management entities:

The consultations will determine whether:

- Known-stock fishery demonstration programs are needed to protect wild stocks of salmon and steelhead and implement the system policies and subbasin plans adopted by the Council.

Discussion:

Known-stock fishery demonstration programs are an integral ingredient of harvest management. The interest in known-stock fisheries is generated by the need for increased harvest on healthy stocks while minimizing or eliminating impacts on less viable fish populations. Known-stock fisheries are also developed to create new opportunities for limited groups of harvesters.

BPA continues to see only a very indirect relationship between known-stock fishery programs and mitigation responsibilities for the hydroelectric system. BPA realizes that harvest **management**, production planning, and hydroelectric mitigation must be closely coordinated and integrated. **However**, the burden to fund all three components and their coordination is not the electric ratepayers responsibility. BPA believes ratepayer dollars **must** focus primarily on mitigation efforts that produce fish and wildlife products and secondarily on planning efforts. While sound harvest management is in the ratepayers interest to accomplish a mitigation program for hydroelectric development, it is not a justification for ratepayer expenditures. Increasing runs and protecting upstream investments alone do not qualify a measure for BPA funding. In addition, accomplishing the objectives of the Fish and Wildlife Program will **turn** as much on the diligence of others in discharging their responsibilities as on the diligence of BPA in discharging its duties.

We believe it is important to clearly define what are **BPA's** responsibilities and what are the responsibilities of others. Individual accountability is critical to the Council's ability to effectively exercise its roles of oversight and facilitation. BPA involvement in harvest management could blur the demarcation of responsibility in this area, which should fall squarely with the harvest management agencies. Although responsibilities often overlap, responsibility for other types of measures should also fall exclusively or primarily on the agencies and entities which have the authority and obligation to implement them. **BPA's** focus in the anadrowus fish area

should be on measures which directly increase the production of smolts, address problems requiring “system” solutions, and improve passage at non-hydroelectric locations as off-site mitigation.

MEASURE: 504(e)

Suggested Language: Omit Measure 504(e).

Discussion:

Bonneville Power Administration (BPA) funds are to support measures to protect, mitigate, and enhance fishery resources to the extent affected by hydroelectric development. Research on the influence of oceanographic factors on the distribution, survival and growth of Columbia River salmon and steelhead is beyond reasonable expectation for ratepayer funds.

BPA has analyzed the extent of impact from hydroelectric operations on flows into the estuary and found only minor changes in seasonal flows. A hydroelectric effect is therefore obscure.

While knowledge of the early ocean life phase of salmonids is of importance, BPA believes the acquisition of such knowledge is an appropriate responsibility of the fishery management entities. BPA funds must continue to focus on the primary effects of hydroelectric development and operations, and on priority off-site enhancement.

SECTION 700

MEASURE: 704(a) (17)

Suggested Language: Omit Measure 704(a)(17) in its entirety.

Discussion:

BPA strongly suggests the Council reject this measure. Although BPA agrees that the flow problem in the Umatilla River and other Columbia River tributaries with similar problems should ultimately be resolved, to provide maximum fish benefits, a number of concerns argue against BPA participation in this particular project. First, BPA opposes the position that project costs should be borne disproportionately by ratepayers in comparison to nonfishery beneficiaries. Secondly, providing the pumping power means foregoing opportunities to sell that power at more lucrative rates on the open market. The annual operation and maintenance costs of up to **\$1,000,000/year**, concern BPA in light of significant revenue shortfall projected through 1989. Finally, and most critically, there is no assurance that increased Umatilla River flows resulting from the project will stay in the river and will be available in sufficient amounts, at the appropriate times, and in enough water years to improve anadromous fish passage and spawning and rearing conditions. For these reasons, BPA is convinced that the incremental benefits from the Bureau project are uncertain and are relatively small compared to the high cost of that project.

MEASURE: 704(d)(1)

Suggested language:

(d) Habitat Improvement and Passage Restoration

(1) Upon review by the Council, Bonneville is expected to provide funds for habitat improvement and passage restoration or improvement measures found in Table 2. Each fiscal year, Bonneville is expected to Present its plan for such project funding for the fiscal year to the Council. Bonneville is expected to require the following explanation for projects:

- (A) An explanation of the anadromous fish benefits, the habitat enhancement potential and escapement, including but not limited to:
 - (i) Species, stocks, present escapement, and trends;
 - (ii) Existing smolt production, existing potential for smolt production, and potential with habitat or passage improvement.
 - (iii) Habitat availability, present condition, and potential enhancement; and
 - (iv) Requirements for hatchery supplementation and availability of fish for stocking.
- (B) Cost estimates for feasibility, design, construction maintenance and operation, evaluation, and NEPA compliance.
- (C) Time schedule for completion of each project by phases.
- (D) Documentation of coordination and consultation efforts, including:
 - (i) History of cooperative efforts by agencies, tribes, utilities, and private landowners;
 - (ii) Coordinated habitat basin plans and/or State and tribal fish plans; and
 - (iii) Protection of ratepayer investment by execution of agreements, easements, or permits.

The Council encourages the development of agreements providing for cost sharing between Bonneville and appropriate entities for the implementation of those measures which are necessary to mitigate non-hydroelectric effects.

Bonneville shall fund the habitat and tributary passage projects from Table 2 as provided in section 1504, action item 34.5. No new habitat projects are to be implemented until subbasin plans are completed.
~~The Council expects other projects listed in Table 2 to be considered in subbasin planning conducted pursuant to section 204.~~

Discussion:

The data requested in BPA's suggested Measure 704(d)(l) are basic information which are needed in any rational management process. Possibly, this information would be provided in the subbasin planning process. However, the provision of these data is not necessarily assured. These basic data are needed by the Council, as well as all other Program participants, to allow decisions about cost-effectiveness and priority, and to provide fundamental data needed for planproject implementation, and evaluations.

In order to avoid confusion over whether new habitat projects can be implemented prior to completion of subbasin plans, we recommend that language clearly state the Council's expectation. Pursuant to consultations between BPA and the Council, we believe it is the Council's expectation that new habitat projects will not be implemented until subbasin plans are complete. A similar revision has also been recommended for Action Item 34.02 in Section 1504.

MEASURE: 704(g)(1)

Suggested Language:

. . . (line 5) Where current knowledge is sufficient certain stocks may be moved to particular upriver streams. This comprehensive reprogramming plan should have sufficient definition to allow a smooth transition to the implementation phase. This plan must include specific stocks, time of release, size, and location of transferred fish.

Discussion:

The suggested new language adds further definition to Measure 704(g)(1). This added definition is needed to facilitate timely and orderly implementation pursuant to Measure 704(g)(2).

MEASURE: 704(g)(2)

Suggested Language: Accept as written.

MEASURE: 704(h)(2)(E)

Suggested Language: BPA concurs with deletion.

MEASURE: 704(i)(5)(A)

Suggested Language:

(A) Prior to design of the production and outplanting facility or facilities, and in coordination with fish and wildlife agencies and Tribes. Bonneville shall fund the ~~fish-and-wildlife-agencies and-tribes-to~~ evaluation of alternative facilities and the development of a master plan for the outplanting facility or facilities. The plan will include the following:

Discussion:

The entity/entities BPA funds to ~~carryout~~ a Program action is a decision the U.S. Government must make in accordance with Federal procurement procedures. Although BPA relies heavily on the region's fish and wildlife agencies and Indian tribes to implement measures which BPA funds, identification of the implementing entity in the Program is inappropriate.

MEASURE: 704(j)(3)

Suggested language:

Bonneville shall fund an investigation of the feasibility of propagating~~ion-of~~ salmon and/or steelhead ~~smolts~~ in the ~~2.8-mile~~ long fish ladder located at Pelton Dam on the Deschutes River in Oregon, prior to full implementation.

Discussion:

The requested change is intended to insure that the effort is feasible and will include the best biological and engineering criteria. If significant impediments are disclosed, this precaution would save funds for more effective projects. If no impediments are evident, the project would proceed accordingly.

SECTION 800

MEASURE: 801

Suggested Language: Accept as written.

MEASURE: 804(a)(2)

Suggested Language:

. . . (Lines 7 and 8) By October 1, 1989, Bonneville shall present the results of the studies to the Council. Montana Department of Fish, Wildlife and Parks shall make recommendations to the Council for further action and necessary Program amendments. ~~coordinated-with other-Montana-resident-fish-studies.~~

Discussion:

Bonneville will facilitate the completion of the ongoing studies as a part of implementation responsibilities and will present the study results. Recommendations for further action should come from the cognizant management authority. The suggested language is more consistent with language elsewhere in the Program where an ongoing study is completed and future action is based on the results when available.

MEASURE: 804(a)(3)

Suggested Language:

. . . (Lines 5 and 6) By October 1, 1989, Bonneville shall present the results of the studies to the Council. Recommendations to the Council for further action and necessary Program amendments should come from the Confederated Salish-Kootenai Tribes and the Montana Department of Fish, Wildlife and Parks. ~~coordinated-with-other Montana-resident-fish-studies.~~

Discussion:

Rationale for this change is the same as for Measure 804(a)(2).

MEASURE: 804(a)(4)-(9)

Suggested Language: Accept as written.

MEASURE: 804(b)(1)(c)

Suggested Language: Accept as written.

MEASURE 804(b)(Z)

Suggested Language: Accept as written.

MEASURE: 804(b)(3)

Suggested Language:

Bonneville shall fund the following research to develop reservoir operating procedures:

Bonneville shall present ~~recommendations concerning these studies~~ the results of the studies to the Council by November 15, 1987. Montana Department of Fish, Wildlife and Parks shall make proposals for further action and Program amendment ~~shall be submitted~~ to the Council at that time.

Discussion:

Rationale for this ~~recommended~~ change is the same as for Measure 804(a)(2).

MEASURE: 804(b)(4)

Suggested Language:

. . . (lines 8 and 9) The study shall be completed and Bonneville shall present the results ~~recommendations for further action~~ to the Council by November 15, 1987. Montana Department of Fish, Wildlife and Parks shall make recommendations for further action and program amendment at that time.

Discussion:

Rationale for this ~~recommended~~ change is the same as for Measure 804(a)(2).

MEASURE: 804(b)(5)

Suggested Language :

. . . (Lines S-10) These studies shall be conducted in cooperation with the Confederated Salish-Kootenai Tribes, Montana Power Company and the Bureau of Reclamation. By October 1, 1989, Bonneville shall present the Council with the results of ~~recommendations-regarding~~ these studies. The ~~recommendations~~ for further action and necessary Program amendments shall be coordinated with the above agencies, tribes and other Montana resident fish projects. Proposals for further action also shall be submitted to the Council at that time.

Discussion:

Rationale for this ~~recommended~~ change is the same as for

Measure 804(a)(2).

MEASURE: 804(b)(6)

Suggested Language:

. . . (lines 4-7) All studies conducted under this measure shall be coordinated to the fullest extent practicable. By October 1, 1989, Bonneville will present the Council with the study results. ~~recommendations-regarding-these-studies~~ Montana Department of Fish, Wildlife and Parks and the Confederated Salish-Kootenai Tribes shall make ~~recommendations~~ to the Council for further actions and necessary Program amendments. The ~~recommendations~~ shall be coordinated with other Montana resident fish studies.

Discussion:

Rationale for this recommended change is the same as for Measure 804(a)(2).

MEASURE: 804(c)(1)

Suggested Language: Accept as written.

MEASURE: 804(e)(1)-(11)

Suggested Language: Accept as written.

MEASURE: 804(g)(1)

Suggested Language: Accept as written.

Discussion:

Several resident fish substitution measures direct BPA to fund an Indian tribe or fish and wildlife agency to conduct studies and evaluations, or manage a facility once constructed. Although BPA relies heavily on the Region's fish and wildlife agencies and Indian tribes to implement measures which BPA funds, identification in the Program of the entity to be funded is inappropriate.

MEASURE: 804(g)(1)(A)-(C)

Suggested Language: Accept as written.

MEASURE: 804(g)(1)(D)

Suggested language:

(D) A ~~three~~ one year fisheries survey of the Pend Oreille River within the Boundaries of the Kalispel Indian Reservation. This survey will provide: (1) baseline information about the existing yellow perch fishery; ~~(2) a means to determine the feasibility of a yellow perch aquaculture facility;~~ and (3 2) information on the possibility of establishing spawning structures for largemouth bass to overcome fluctuating water levels during egg incubation. ~~If justified by the results of the feasibility study, fund the design, construction, operation and maintenance of a yellow perch hatchery on the Kalispel Indian Reservation.~~

Discussion:

A one year fisheries survey should be adequate to determine a management plan for the Pend Oreille River. The proposed yellow perch aquaculture facility designed to process and market perch filets does not protect, mitigate, or enhance fish and wildlife affected by the hydroelectric system. The fisheries study could lead to development of a plan that would enhance the fish in the Pend Oreille River.

MEASURE: 804(g)(1)(E)

Suggested Language :

- (E) (1) Design, construction, operation and maintenance of a low capital sturgeon and kokanee hatchery on the Kootenai Indian Reservation, if results from proposed studies indicate it is needed for the preservation and enhancement of the Kootenai River white sturgeon. ~~The Kootenai Tribe, in coordination with the Idaho Department of Fish and Game, will be responsible for the hatchery facility.~~
- (2) A survey of the Kootenai River downstream from ~~Bonnors Ferry, Idaho~~ Kootenai Falls in Montana to the Canadian border to determine the status and genetic composition of the white sturgeon ~~(i) evaluate the effectiveness of the hatchery,~~ and ~~(ii)~~ assess the impact of water level fluctuations caused by Libby Dam on ~~hatchery operation for outplanting of the white sturgeon and kokanee~~ in the Idaho portion of the Kootenai River. ~~The Kootenai Tribe will design and conduct the survey in coordination with the Idaho Department of Fish and Game.~~

Discussion:

The status of the white sturgeon stocks and their genetic makeup should be determined before a hatchery is considered. A difference of opinion exists regarding the status of white sturgeon stocks in the Kootenai River. The Kootenai Tribe maintains that the stocks are in jeopardy. Personnel from the Fisheries Branch of the British Columbia Ministry of Environment believe that a healthy population of white sturgeon exists in the British Columbia portion of the Kootenai River about 30 miles downstream from Bonners Ferry, Idaho. They will cooperate in any studies, including the genetic study, that are proposed. Personnel from Idaho Department of Fish and Game also wish

to determine the status of the stocks and their habitat requirements before proceeding with a hatchery. Bonneville will select the entity to conduct the study. Funding would be handled through Bonneville's regular procurement process. If a hatchery should be needed, the selection of the managing agency will be made by Bonneville.

The reason for deletion of the kokanee as a species to be reared in the hatchery is that the major fishery for them would be in Kootenay lake, British Columbia. They would rear there and be taken by the Canadian sports fishermen when in prime condition. Fishermen in the U.S. would only harvest those in spawning condition on their return to the river.

MEASURE: 804(g)(2)(A)-(F)

Suggested Language: Reject the proposed measures.

Discussion:

BPA takes no position with regard to the biological merit of any of the resident fish substitution projects proposed for areas above Hells Canyon Dam. However, the projects should be rejected from further consideration for inclusion in the Program because they do not satisfy principles established by the Council for resident fish substitution (Section 206(a)-(i)). Specifically, failure to

identify an appropriate funding source means that it is not possible to ascribe damage to the development and operation of a hydroelectric project. Resolution of this lack of information is not provided by seeking input during the amendment process on who should fund these projects. Resolution is achieved by rejecting the project(s) and putting the burden of proof on the project sponsor to fully satisfy the Council's resident fish substitution policies and principles. When this information is fully developed by the project's sponsor, the Council is able to accept the proposal for amendment into the Program. At that time, the focus of discussions through the Council's amendment process would appropriately be on protection, mitigation, and enhancement of fish and wildlife affected by hydroelectric development and operations.

REJECTED AMENDMENT APPLICATIONS

MEASURE: 800/ODFW (REJECTED)

Suggested Language: Bonneville supports the rejection.

MEASURE: 804(a)(1)/MDFWP (REJECTED)

Suggested Language: Bonneville supports the rejection.

MEASURE: 804(b)/SB (REJECTED)

Suggested Language: Bonneville supports the rejection.

MEASURE: 804(b)(1)(A)/MDFWP (REJECTED)

Suggested Language: Bonneville supports the rejection.

MEASURE: 804(e)/IDFG-1 and IDFG-2 (REJECTED)

Suggested Language: Bonneville supports the rejection.

MEASURE: 804(e)(6)/IDFG (REJECTED)

Suggested Language: Bonneville supports the rejection.

MEASURE: 804(e)/OT (REJECTED)

Suggested Language: Bonneville supports the rejection.

MEASURE: 804(e)/WDG (REJECTED)

Suggested Language: Bonneville supports the rejection.

SECTION 1000

MEASURE: 1003

Suggested Language: Accept as written.

MEASURE: 1003(b)(4)

Suggested Language: Accept as written.

MEASURE: 1003(b)(4), (Table 5)

Suggested Language:

TABLE 5

<u>Project or Area</u>	<u>Target Species</u>	<u>Wildlife or Eabitat Losses Attributed to Hydropower</u>	<u>Hydropower-Obligation Mitigation Coal Projects/Schedule</u>
Hungry Horse	Elk/ Mule Beer	133 175 Elk <u>6,650 acres</u> <u>Winter Range</u>	Bonneville shall fund projects to enhance winter range on Flathead National Forest lands to support <u>a target carrying capacity of</u> an additional 133 elk. Prototype-project-to-test assumption-of-increased-carrying capacity. Total nubmer of acres to be treated will not be <u>established</u> remain-flexible until theory-of increased <u>in</u> carrying capacity-is-tested, <u>for winter range enhancement is determined.</u> <u>An initial limit of 6,650 acres of winter range will be enhanced until increased carrying capacity is determined.</u> Year 1, prototype advanced design. Years 1-5, implement test and monitor; report to Council for further action. Memoranda-of-understanding-will be-signed-by-Montana-Department of-Fish,-Wildlife-and-Parks, Flathead-National-Forest,-and Bonneville-to-ensure-that funding-for-projeects-is-in

~~addition to, and not in lieu of, other expenditures authorized or required from other entities under other agreements or provisions of law. Bonneville shall examine the possibility of establishing a trust account to fund these wildlife projects and others.~~

Libby Dam	Black Bear	<u>27-34</u> 36-45 animals <u>8,590 acres</u> <u>Critical Eabitat</u>	Bonneville shall fund projects to protect 8,590 acres of riparian habitat and travel corridors through the acquisition of conservation easements. Years 1- <u>2</u> , advanced design; interagency coordination; prioritizing sites; appraisals. Upon completion, acquire easements.
	Grizzly Bear	2-4 3-5 animals 8,590 acres Critical Habitat	
	Waterfowl	<u>1,863</u> 1,508 acres <u>(1,146 acres</u> <u>prime habitat)</u>	Bonneville shall fund projects to protect and/or enhance 1,146 acres of wetland habitat in Flathead Valley. Same schedule as bear projects.
	Terrestrial Furbearers	<u>14,542</u> acres	Bonneville shall negotiate cooperative agreements with state and federal agencies and private landholders to protect 11,050 acres of selected old growth forest stands. Same schedule as bear projects. Initiate agreements in Year 2.
	White-tailed Deer	1,340 animals <u>8,745 acres</u> <u>Winter Range</u>	Bonneville shall fund projects to enhance and maintain winter range in northwestern Montana to support <u>a target carrying capacity of</u> an additional <u>1,340</u> 1,059 white-tailed deer. Prototype project to test assumption of increased carrying capacity. Total number of acres to be treated will <u>not be established remain flexible</u> until theory of increased in carrying capacity <u>for winter range enhancement is determined</u>

		<p>is-tested. <u>An initial limit of 8,745 acres will be enhanced until increased carrying capacity is determined.</u> Years 1-2-3, advanced design; years 3-10, implement and monitor.</p>
Mule Deer	<p>485 animals <u>10,586 acres</u></p>	<p>Bonneville shall fund projects to enhance and-maintain winter range on Kootenai National Forest lands adjacent to Lake Koocanusa to support <u>a target carrying capacity of an additional 485 383 mule deer.</u> Prototype-project-to-test assumption-of-increased-carrying capacity. Total number of acres to be treated will not be established until <u>theory-of increase in carrying capacity for winter range enhancement is determined.</u> has-been-tested. <u>An initial limit of 10,586 acres will be enhanced until increased carrying capacity is determined.</u> Year 1, advanced design. Years 2-10, implement and monitor.</p>
Bighorn Sheep	<p>66-W sheep <u>3,190 acres</u></p>	<p>Bonneville shall fund projects to enhance and-maintain winter/spring range on Kootenai National Forest lands adjacent to Lake Koocanusa to support <u>a target carrying capacity of an additional 66 70 sheep.</u> Prototype-project-to-test assumption-of-increased-carrying capacity. Total number of acres to be treated will <u>not be established</u> remain-flexible until theory-is-tested. <u>increase in carrying for habitat enhancement is determined.</u> <u>An initial limit of 3,190 acres will be enhanced until increased carrying capacity is determined.</u> Year 1, advance design. Years 2-10, implement and monitor.</p>

Columbian Sharp-tailed Grouse	<u>2,462</u> 3,116 acres	Bonneville shall fund projects to protect 2,462 acres of prairie habitat within the vicinity of Tobacco Plains. Years <u>1-2</u> , advanced design. Years-a <u>3-10</u> , acquire easements.
Waterfowl	<u>10,460</u> 13,241 acres <u>(3,418 acres</u> <u>prime habitat)</u>	Bonneville shall fund projects to protect and/or enhance 3,418 acres of wetland habitat within the Flathead Valley. <u>Years 1-2</u> , advanced design. Upon completion of design, implement projects in years-2 <u>3-10</u> .

Discussion:

BPA generally concurs with the actions listed in Table 5, for wildlife protection, mitigation, and enhancement at Hungry Horse and Libby Dams. The modifications in the text are made to list wildlife losses in terms of those attributable to hydro power; set a limit on the initial amount of acres of habitat to enhance; delete the language requiring Memoranda of Understanding; and delete the proposed terrestrial furbearer project for Hungry Horse.

Wildlife Losses - Listing wildlife losses in terms of those attributable to hydropower clarifies the estimated impact hydro development had on wildlife and/or wildlife habitat at these facilities.

Acreage Limit on Habitat Enhancement - An interim level (target) for the number of acres of wildlife habitat to enhance needs to be established. This should be done because the total acreage goal for

wildlife habitat enhancement cannot be established until the theory of increased carrying capacity is determined. An initial acreage target for wildlife habitat enhancement, based on the amount of habitat inundated by hydro development (one to one ratio), would be a reasonable approach for establishing an interim level. This level would provide sufficient habitat base from which to initiate an enhancement program and estimate benefits from treatment efforts. However, it would still be below the total number of acres that will likely need treatment.

Memorandum of Understanding – Including in the Program a requirement to develop Memoranda of Understanding to ensure that BPA funding is in addition to, not in lieu of other expenditures is inappropriate. The Northwest Power Act is clear that BPA funds are to be “in addition to and not in lieu of other expenditures authorized or required from other entities.” BPA will not enter into actions where it believes funding would be in lieu of other expenditures.

Terrestrial Furbearer Project – The scope, feasibility, and cost of the terrestrial furbearer project are unknown. As written, this project could be used to compensate private timber companies and the State school trust fund for deferred sales of old growth timber. BPA **recommends** that the Council defer inclusion of this project in the Program until ramifications of such a project are known.

REJECTED AMENDMENT APPLICATIONS

MEASURE 1004(e)/PF (REJECTED)

Suggested Language : BPA supports the rejection.

MEASURE1004(b)-(d)/PNUCC (REJECTED)

Suggested Language : BPA supports the rejection.

SECTION 1400

MEASURE: 1401; 1403; 1404(b)(2)

Suggested Language: Accept as written.

SECTION 1500

MEASURE: 1503

Suggested language:

DAD page 108, line 6-8) . . . As stated in program section 704(d)(l) and action item 34.02 and 37, Bonneville should complete the projects underway and not start new ones until subbasin plans are completed ~~as-need-for-additional-habitat-is-demonstrated.~~

Discussion:

Bonneville understands the Council's expectation regarding funding of new habitat and passage enhancement projects as, "fund no new projects until **subbasin** plans have been developed." We have adjusted DAD language accordingly in section 704(d)(l) and action item 34.02.

MEASURE: 1504 ACTION ITEMS

ACTION ITEM: 32.1

Suggested language:

Test and evaluate an alternative conduit system for juvenile fish by November 15, 1987. Report results to the Council by January 1988. [Section 404(c)(3).] [Source: Council Staff.] Incorporate studies to investigate spill effectiveness, **hourly fish-passage-patterns**, and reservoir mortality at **mainstem** Federal projects, into the five-year research work plan on reservoir

mortality and Water Budget effectiveness (see Program section 205 (c)(1) and action item 39.1). These studies shall be consistent with the program research policies found in section 205. [Section 304(d)(1).]

Discussion:

BPA should not be required to fund "hourly fish passage patterns," since this is COE-funded hydroacoustic work.

ACTION ITEM: 33.1

Suggested Language:

Continue to implement Water Budget measures including funding of fish passage managers. ~~and tribal coordination expenses.~~
[Sections 304(a)-(c).]

Discussion:

BPA will not be funding the Tribal coordination expenses associated with the Water Budget starting in 1987. CRITFC has secured alternative funds through the BIA.

ACTION ITEM: 33.2 - 33.3

Suggested Language: Accept as written.

ACTIONITEM:34.01

Suggested Language: Delete Action Item 34.01 in its entirety.

Discussion:

Delete as per comments on Measure 704(b)(17).

ACTION ITEM: 34.4

Suggested Language: Accept as written.

ACTIONITEM:34.5

Suggested Language:

Develop an annual work plan ~~for submission to the Council by September 15 of each fiscal year~~ for implementation of section 704(d). ~~Prepare and submit to the Council an annual report on activities in October.~~ by September 15 of each fiscal year.

Discussion:

This revision reflects BPA's actual practice in each of the last two fiscal years.

ACTION ITEM: 34.02

Suggested language:

Take action on ~~Complete~~ the following ongoing projects from Table 2 of Section 704(d)(l) by 1989.

Major Area:

<u>Subbasin</u>	<u>Bonneville Project Number</u>	<u>Title</u>
COLUMBIA RIVER BELOW BONNEVILLE DAM:		
Willamette Subbasin	83-385	• Fish-Creek, Wash-Creek-Habitat-Enhancement
	83-386	• Lake-Branch-Creek-Habitat-Improvement
	84-011	• Collawash Falls Passage
		• Fish Creek, <u>Wash Creek</u> Habitat Improvement (Previously Project No. 83-385)
		• Fish Creek Evaluation
		• Lake Branch Creek Habitat Improvement (Previously Project No. 83-386)
		• Hot Springs Fork Passage and Habitat Improvement
		• Oak Grove Habitat Improvement
		• <u>Fifteenmile Creek Habitat Improvement (USFS)</u>
	<u>86-79</u>	• Fifteenmile Creek Habitat Improvement <u>(ODFW)</u>
	86-090	• Little-Fall-Creek-Fish-Passage
COLUMBIA RIVER BETWEEN BONNEVILLE DAM AND CONFLUENCE WITH SNAKE RIVER:		
Deschutes Subbasin	81-108	• Warm Springs Habitat/Production Potential Assessment
	83-323	• Deschutes-River-Spawning-Gravel-Study-and-Plan

	84-007	• Trout Creek Riparian Enhancement Coordination
	84-062	• Trout Creek Riparian Enhancement Coordination
	86-093	• Trout Creek Benefit/Cost Analysis Refinement
	86-094	• Trout Creek Benefit/Cost Analysis, - Photomosaics Refinement
	86-121	• Trout Creek Enhancement--Implementation (83-373, 84-007, 84-062, 86-093 and 86-094).
John Day Subbasin	83-394	• Glear Creek, Granite Creek Habitat Improvement
	83-395	• North Fork John Day Habitat Improvement
	84-008	• North Fork John Day River Habitat Improvement (Previously Project No. 83-395)
		• North Fork John Day River Tributaries, Elabitat Improvement
		• Upper Mainstem, John Day River Habitat - -
	84-021	• Mainstem John Day river Habitat Improvement
		• Middle Fork John Day River Habitat Improvement
		• North Fork John Day River Habitat Improvement
	84-022	• Big Boulder Creek Habitat Improvement
		• Granite Creek Habitat Improvement
	85-071	• South Fork John Day River Habitat Improvement/ Izee Falls Passage
		• <u>Izee Falls Passage</u>

Umatilla ²⁰ Subbasin	83-436	• Three Mile Dam Passage (<u>complete in 1988</u>)
	86-016 <u>87-100</u>	• Umatilla Habitat Improvement (<u>initiate in 1987</u>)
	86-056 <u>87-104</u>	• Passage Improvement, Umatilla River Water Diversions (<u>initiate in 1987</u>)

20./ Umatilla subbasin projects should include the following specific actions: Lower Umatilla River Channel Modification, ~~Brownell-Diversion Downstream-Passage-Improvement~~, Three Mile Dam (West Extension) Upstream and Downstream Passage Improvement, Meacham Creek Habitat Improvement, North Fork Meacham Creek Habitat Improvement, Birch Creek Habitat Improvement, East Fork Birch Creek Habitat Improvement, West Fork Birch Creek Habitat Improvement, Buckaroo Creek Habitat Improvement, Ryan Creek Habitat Improvement, Mainstem Umatilla River Habitat Improvement, North Fork Umatilla River Habitat Improvement, South Fork Umatilla River Habitat Improvement, Westland Smolt Trapping Facility Expansion, Umatilla Adult and Smolt Trucking Program Expansion, Westland Diversion Upstream and Downstream Passage Improvement, Stanfield Diversion Upstream and Downstream Passage Improvement, Cold Springs Diversion Upstream and Downstream Passage Improvement, Maxwell Diversion Upstream and Downstream Passage Improvement, ~~Dillion-Diversion-Downstream-Passage Improvement~~.

COLUMBIA RIVER BETWEEN CONFLUENCE OF SNAKE RIVER AND CHIEF JOSEPH DAM

Yakima Subbasin	86-075	• Little Naches River Passage
Wenatchee Subbasin	85-052	• Tumwater Falls Dam Passage
	85-053	• Dryden Dam Passage
	85-086	• Tumwater/Dryden-Passage-Environmental Assessment
Okanogan Subbasin	83-477	• Enloe Dam Passage

SNAKE RIVER BELOW HELLS CANYON DAM:

Clearwater Subbasin	83-W-1	• Red River Fish Habitat Improvement
	83-522	• Lolo, Crooked Fork, White Sands Creeks Habitat Improvement
	84-005	• Red River Habitat Improvement <u>(Previously Project No. 83-501)</u>
		• Crooked River Habitat Improvement
	86-026 <u>87-112</u>	• Orofino Creek Passage
Grande Ronde Subbasin	84-009	• Chesnimus/Swamp Creeks Habitat-Inventory
		• Upper Grande Ronde/Fly Creek Implementation Design-Phase
		• Chesnimus Creek/Riparian-Planting
		• Swamp Creek/Riparian-Planting
		• Sheep Creek/ Riparian, Habitat Improvement
	84-025	• Sheep Creek Surveys, Onsite-Preparation
		• Fly Creek Surveys, Onsite-Preparation
		• Mainstem Grande Ronde <u>River</u> Surveys, Onsite-Preparation-
		• Joseph Creek Plan, Surveys, Onsite-Preparation
		• Elk Creek Habitat-Improvement
	86-110	• Grande-Ronde-Monitoring

Salmon Subbasin	<u>83-07</u>	<ul style="list-style-type: none"> • South Fork Salmon River Fish Passage • South Fork Salmon River Tributaries Fish Passage
	83-359	<ul style="list-style-type: none"> • Bear Valley Creek Habitat Improvement • Yankee Fork Jordan Creek Habitat Improvement • East Fork Salmon River Habitat Improvement
	83-415	<ul style="list-style-type: none"> • Alturus Lake Creek <u>Passage</u> Flow-Augmentations • <u>Upper Salmon River Passage</u>
	84-023	<ul style="list-style-type: none"> • Camas Creek, Idaho <u>Habitat</u>
	84-024	<ul style="list-style-type: none"> • Marsh Creek Habitat Improvement • Elk Creek Habitat Improvement • Upper Salmon River Habitat Improvement • Bear Valley Creek Habitat Improvement • Valley Creek Habitat-Inventory
	84-028	<ul style="list-style-type: none"> • Lemhi River Rehabilitation
	84-029	<ul style="list-style-type: none"> • Panther Creek Habitat <u>Improvement</u> Evaluation

NON-SITE-SPECIFIC PROJECTS:

	85-062	<ul style="list-style-type: none"> • Passage Improvement Evauation
	85-065	<ul style="list-style-type: none"> • Technical Assistance for Fish and Wildlife Protection
	86-078	<ul style="list-style-type: none"> • Habitat Improvement Evaluation
	86-107	<ul style="list-style-type: none"> • Evaluation and Monitoring Workshop
	<u>86-1&8-87-113</u>	<ul style="list-style-type: none"> • Oregon General and Intensive Monitoring
	<u>87-115</u>	<ul style="list-style-type: none"> • <u>Grande Ronde Monitoring</u>
	86-109 <u>87-114</u>	<ul style="list-style-type: none"> • Washington General and Intensive Monitoring

BPA shall not implement any new habitat and passage- ~~Additional projects from 704(d)(l) may be added to this list upon a demonstration to the Council of a need for additional habitat which can be met best by the project proposed for funding. --Following Council~~ until the Council adopts adoption of system policies and subbasin plans, under sections 203 and 204. After adoption of system policies and subbasin plans all projects funded from 704(d)(l) must be consistent with those policies and plans.

Discussion:

Action Item 34.02, pursuant to footnote 19 on page 129 of the DAD, was prepared from incomplete or outdated information. Pursuant to a request from Council staff, BPA has revised the list of projects found on pages 130-136 to more accurately reflect ongoing or planned projects.

Deletions in footnote 20 reflect the fact that these actions are being funded by the National Marine Fisheries Service, not BPA, as part of the Northeastern Oregon Screening Program. We understand that those projects removed from footnote 20 are scheduled to be completed during FY 1987.

Revisions to the concluding paragraph of Action Item 34.02 (page 136 of the DAD) reflect revisions suggested by BPA to Section 704(d)(l) and 1503 (page 108). This language revisions clarifies the Program intent with regard to BPA funding of new habitat and passage projects prior to adoption of subbasin plans.

ACTION ITEM: 34.11

Suggested Language: Accept as written.

ACTION ITEM: 34.12

Suggested Language: Accept as written.

ACTION ITEM: 34.13

Suggested Language:

. . . (line 2) temporary facilities~~-by-spring-of-1986-8.~~

Discussion:

Action Item 34.20 requires the fish and wildlife agencies and Tribes to develop the planning documents associated with the temporary John Day acclimation facilities. These plans are not anticipated to be available until September of 1987. We assume the Council will take some type of action on these plans and then **recomm**end funding action by BPA. Both the timeframe for completion of the plans and Council **action are speculative at this time. Therefore, we recomm**end that

the expected completion date for Action Item 34.13 not be included in the Program. This date appropriately can be added by the Council after having received the John Day acclimation pond plans and having taken action on them.

ACTION ~~ITEM~~: 34.14 - 34.16

Suggested Language: Accept as written.

ACTION ITEM: 34.17

Suggested Language:

Design low capital production facility on the Nez Perce Reservation, and initiate construction, ~~by May 1989.~~

Discussion:

The fishery management disagreement between the Nez Perce Tribe and the Idaho Department of Fish and Game (see BPA's letter to the Council dated October 25, 1985) ~~must~~ be resolved by these two entities before BPA can proceed with implementation of Action Item 34.17. This management disagreement may not be resolved in time to allow design and initiation of construction by ~~May~~ 1989, or may never be resolved. Therefore, BPA suggests deletion of the date.

ACTIONITEM:34.18

Suggested language: Accept as written.

Discussion:

The fishery management disagreement referred to under the discussion for Action Item 34.17 must be resolved before BPA can implement Action Item 34.18.

ACTIONITEM:34.19

Suggested Language:

Accept as written.

ACTIONITEM:34.03

Suggested Language:

34.03 Northeastern Oregon Spring Chinook Outplanting Facility

- Fund master plan and preliminary design for northeastern Oregon spring chinook production outplanting facility or facilities in fiscal year 1990 ~~1988~~.

- Upon approval by the Council of the master plan and preliminary design, fund design beginning in fiscal year 1991 ~~1989~~.
- Fund construction upon completion of design.

Discussion:

Revisions reflect timing and budget realities associated with start up of this project. BPA has questions about whether the Northeastern Oregon hatchery facility is one or four facilities, the relationship of this facility to the **Umatilla** hatchery, and whether planning for the Northeastern Oregon facility should await **subbasin** planning. The Northeastern Oregon facility (or facilities) will also require approval in an Act of Congress. Because of **BPA's** current revenue situation, which required budget reductions through FY 1989, the earliest date for inclusion of planning for this facility in our budget is FY 1990. Preliminary design is a logical extension of the master plan and should be developed concurrently.

ACTION ITEM: 34.20

Suggested Language:

Provide the Council with the site survey report and a plan for design, construction, and monitoring of John Day acclimation ponds by September 1987. This plan should include specific sites and conceptual designs of the proposed facilities. [Section 704(i)(2).]

Discussion:

The revisions suggested in this language change will **greatly** facilitate BPA's planning and budgeting process associated with implementation of the John Day temporary acclimation ponds.

ACTION ITEM: 34.23, 34.24, 34.28

Suggested Language: Accept as written.

ACTION ITEM: 35.4

Suggested Language:

Complete study and develop methods for assessing cumulative effects by ~~November-1985~~ May 1987. [Section 1204(b)(2)]

Discussion:

The Council's Hydropower Assessment Steering Committee recommended an additional task to develop procedural guidelines for a cumulative effects method.

ACTION ITEM: 35.5

Suggested Language: Accept as written. [Section 1204(c)(1)]

ACTION ITEM: 35.6

Suggested language: Delete Action Item.

Discussion:

BPA ~~recommends~~ deferring this project because of a similar effort being conducted by the Electric Power Research Institute (EPRI). EPRI's study will test a fixed screen. EPRI will also test existing fish protection devices possibly in combination with one another.

ACTION ITEM: 36.02

Suggested Language:

Form a planning work group to oversee **subbasin** planning consistent with system policies [section 203, 204].

The Council will establish the roles and responsibilities of participants in the **subbasin** planning process, and develop a process to guide development of **subbasin** planning. The roles and responsibilities and **subbasin** planning process will be developed in collaboration with the fish and wildlife agencies, tribes, land and water managers, Bonneville, the utilities, project operators, and other interested parties.

Discussion:

See BPA's comments on Section 204, Subbasin Planning for Salmon and Steelhead Production.

ACTION ITEM: 38.1

Suggested language: Delete this Action Item.

Discussion:

BPA's reasons for opposing this Action Item are presented in discussion on Measure 504(c)(2) and (3).

ACTION ITEM: 39.1

Suggested Language: BPA concurs with deletion of Action Item 39.1.

Discussion:

Bonneville encourages the Council to delete the language of this Action Item. The removal of this "moratorium" on new research projects is critical to Program implementation. The formation of technical work groups will provide a means for BPA to revisit and act on existing research work plans in some areas of emphasis, specifically, hatchery effectiveness and supplementation.

ACTIONITEM:39.01

Suggested Language:

Fund establishment of technical work groups, convene the groups, and facilitate work on to ~~carry out the tasks~~ identified in section 205(c)(1)-(2).

Discussion:

Bonneville supports the formation of technical work groups to develop work plans in the areas of emphasis. Bonneville urges strongly the additional language also identifying Bonneville as the **convenor** and facilitator of the technical work groups.

ACTIONITEMS39.02

Suggested Language:

Fund research in the five-year work plans as approved by the Council. [Sections 205, 304(d), 404, 704(f), **704(h)(2)(A)-(D), (F), 704(k).**]

Discussion:

Program measure 704(h)(2) addresses a variety of operational and technical matters that are associated with hatchery effectiveness research. These include : **(B)** hatchery rearing operations and

release strategies and hatchery practices; (C) genetics and stock assessment; (D) fish health protection; and (F) smolt quality. BPA suggests that it is unwise to limit research funding to only fish diseases. Improved hatchery effectiveness will likely be the result of a variety of factors of which disease is only one aspect. The language should include all of 704(h)(A)-(F).

ACTION ITEMS: 39.03-39.05

Suggested Language: Accept as written.

Discussion:

BPA has no information on the cost of these activities. While we agree with the need for such activities, availability of funds may impact implementation schedules.

ACTION ITEMS: 39.2

Suggested Language: Accept as written.

ACTION ITEM: 39.08

Suggested Language: Accept as written.

ACTION ITEMS: 40.1 - 40.4

Suggested Language:

- 40.1 Upon completion of all mitigation status reports, the fish and wildlife agencies and tribes will submit a list of priority projects to Bonneville and the Council. Consultations among affected parties should begin on Federal Columbia River Power System (FCRPS) hydroelectric facilities. The consultation should define the need for either loss estimates or actual mitigation projects. Prepare and submit to the Council an annual report on activities each April. [Section 1004(b)(1), (2), (3).]
- 40.2 Fund loss statements on FCRPS hydro facilities as needs are identified. [Section 1004(b)(2).]
- 40.3 Initiate consultation on loss statements on FCRPS hydro facilities as the statements are completed. [Section 1004(b)(3).]
- 40.4 Where appropriate, develop mitigation ~~funding~~ plans for FCRPS hydro facilities ~~these projects~~. [Section 1004(d)(1) and (2).]

Discussion:

Action Items 40.1 through 40.4 have been modified to clarify that Bonneville actions will be undertaken only for Federal Columbia River Power System hydroelectric facilities. BPA has consistently held that wildlife protection, mitigation, and enhancement activities for non-Federal hydro facilities are the responsibilities of the project owners. **BPA's** policy, therefore, is not to fund wildlife mitigation planning or wildlife mitigation at non-Federal facilities.

ACTIONITEMS:40.01-40.07

Suggested Language:

- 40.01 In 1987, initiate ~~fund~~ advance design of white-tailed deer, mule deer, Columbia sharp-tailed grouse, and waterfowl projects, and continue ~~to-fund~~ implementation and monitoring of the bighorn sheep project, all designed to mitigate the effects of Libby Dam. [Section 1004(b)(4).]
- 40.02 In 1988, continue ~~to-fund~~ advance design of the white-tailed deer, waterfowl, and Columbia sharp-tailed Grouse projects, begin ~~to-fund~~ implementation and monitoring of the mule deer ~~and-waterfowl~~ projects; continue ~~to-fund~~ implementation and monitoring of the bighorn sheep project ~~and-begin-to-fund-acquisition-of-easements-for-Columbia sharp-tailed-grouse--~~all associated with mitigation of the effects of Libby Dam. [Section 1004(b)(4).]
- 40.03 In 1989, ~~complete-funding-of-advanced-design-and~~ begin ~~funding-of~~ implementation and monitoring of the white-tailed deer and waterfowl projects, begin acquisition of easements for Columbia sharp-tailed grouse; continue ~~to fund~~ implementation and monitoring of the mule deer and, bighorn sheep, ~~and-waterfowl~~ projects; ~~and-continue-to-fund acquisition-of-easements-for-Columbia-sharp-tailed-grouse--~~all as mitigation of the effects of Libby Dam. [Section 1004(b)(4).]
- 40.04 In 1990 and 1991, continue ~~to-fund~~ implementation and monitoring of the white-tailed deer, mule deer, bighorn sheep, and waterfowl projects, and continue ~~funding-of~~ acquisition of easements for Columbia sharp-tailed grouse--all as mitigation of the effects of Libby Dam. [Section 1004(b)(4).]
- 40.05 In 1987, initiate ~~fund-prototype-and~~ advanced design of and begin to implement the elk/mule deer project. Begin advanced design, interagency coordination, site prioritization, and appraisals for the black bear/grizzly, and waterfowl, ~~and-terrestrial-furbearer~~ projects as Hungry Horse Dam mitigation. [Section 1004(b)(4).]
- 40.06 In 1988, continue advanced design of waterfowl and black bear/grizzly bear projects; continue implementation and

~~monitoring of the elk/mule deer project as initiate-~~
~~development-of-cooperative-agreements-to-implement-the~~
~~terrestrial-furbearer-portion-of~~ Hungry Horse Dam
mitigation. [Section 1004(b)(4).]

40.07 In 1988-1991, begin and/or continue implementation of the
elk/mule deer, black bear/grizzly bear, and waterfowl, end
~~terrestrial-furbearer~~ projects as Hungry Horse Dam
mitigation. [Section 1004(b)(4).]

Discussion:

The revisions to Action Items 40.01 through 40.07 are to bring
initiation dates of projects in line with availability of funds.
Also, the terrestrial furbearer project has been deleted from Action
Items 40.05 through 40.07. The rationale for removing this project
is explained in our ~~comments~~ on Measure 1004(b)(4), Table 5.

ACTION ITEM: 41.1

Suggested Language:

In consultation with the Montana Department of Fish and Wildlife and
Parks, Confederated Salish and Kootenai Tribes and the U.S. Fish and
Wildlife Service, continue ongoing work and present the result of the
studies to the Council. The Montana Department of Fish, Wildlife and
Parks, the Confederated Salish and Kootenai Tribes, and the U.S. Fish
and Wildlife Service shall submit recommendations for future action to
the Council by October 1, 1989. [Sections 804(a)(3), 804(a)(9),
804(b)(1)(C), 804(b)(1)(D), 804(b)(3), and 804(b)(5-6).]

Discussion:

Bonneville will facilitate the completion of the ongoing studies as a part of implementation responsibilities and will present the study results. **Recommendations** for further action should come from the cognizant management authority. The suggested language is more **consitent** with language elsewhere in the Program where an ongoing study is completed and future action is based on the results when available.

ACTION ITEMS: 41.2-41.8

Suggested Language: Accept as written.

ACTION ITEM: 41.01

Suggested Language:

In consultation with the Montana Department of Fish, Wildlife and Parks, the Confederated Salish and Kootenai Tribes and the U.S. Fish and Wildlife Service, continue ongoing work and present results of the studies to the Council. The Montana Department of Fish, Wildlife and Parks, the Confederated Salish and Kootenai Tribes, and the U.S. Fish and Wildlife Service shall submit recommendations for further action to the Council, based on drawdown and related studies in Montana, by October 1, 1989 ~~November 15, 1987~~. [Section 804(b)(3-4).]

Discussion:

Date change is necessary to coincide with dates listed in the measure language. Rationale for other changes is the same as for Action Item 41.1.

ACTION ITEM: 41.02

Suggested Language :

Fund stream survey; and if needed the design, construction, operation, and maintenance of a cutthroat and bull trout hatchery on the Coeur d'Alene Reservation; habitat improvement **projects, and** a three-year monitoring program. [Section 804(g)(1)(B).]

Discussion:

The insertion of “and if needed” clarifies **BPA's** position that results from the Stream Survey project will determine the need for a hatchery.

ACTION ITEM: 41.03

Suggested Language:

Fund design, construction, operation and maintenance of kokanee salmon hatcheries at Galbraith Springs and at Sherman Creek starting in ~~October-1987~~ FY 1990. Fund monitoring programs to evaluate the effectiveness of this action. [Section 804(g)(1)(C).]

Discussion:

The date for start up of the project, "October 1987," is unrealistic. BPA's fish and wildlife budget levels are set through FY 1989. The earliest date for start up would be FY 1990.

ACTION ITEM: 41.04

Suggested Language:

Fund design, construction, operation and maintenance for habitat and passage improvement projects on Lake Roosevelt tributary streams starting in ~~October-1987~~ FY 1990. Fund monitoring programs to evaluate the effectiveness of this action. [Section 804(g)(1)(C).]

Discussion:

The date for start up of the project, "*October 1987," is unrealistic. BPA's fish and wildlife budget levels are set through FY 1989. The earliest date for start up would by FY 1990.

ACTIONITEM:41.05

Suggested Language:

Fund design, construction and operation of a low capital sturgeon ~~and kokanee~~ hatchery on the Kootenai Indian Reservation if needed ~~starting in October 1987~~. Fund an evaluation study for the effectiveness of the hatchery. [Section 804(g)(1)(E).]

Discussion:

Word changes clarify BPA's concerns as noted in Section 804(g)(1)(E).

ACTION ITEM: 41.06

Suggested Language: Accept as written.

Discussion:

While BPA can generally accept the language from this action item as written, availability of funds may impact the proposed implementation date.

ACTIONITEM: 41.07

Suggested Language:

Fund fisheries studies ~~and the design, construction, operation and maintenance of a yellow perch aquaculture facility~~ on the Kalispel Reservation. [Section 804(g)(1)(D).]

Discussion:

These changes clarify BPA's concerns as noted in Section 804(g)(1)(D).

ACTIONITEM41.010-41.015

Suggested Language: Reject.

Discussion:

These rejections are consistent with BPA's recommendation as noted in sections 804(g)(2)(A)-(F).

REJECTED AMENDMENT APPLICATIONS

ACTIONITEM:1504(32.6-10)/CBFWC(REJECTED)

Suggested Language: BPA supports the rejection.

ACTIONITEM:1504(32.3)/COE(REJECTED)

Discussion:

BPA accepts the Council's rejection of the first two portions of this amendment, but we don't accept the rejections of that portion of the COE application dealing with a new study of powerhouse and spillway survival at Bonneville Dam. We believe the study could serve to "protect, mitigate, and enhance," since at this point we do not have adequate data to assess spillway survival or powerhouse survival. Existing policies are not based upon scientific data, but rather assumptions, some of which this application proposes to address. Additionally, Section 4(h)(6)(c) of the Act requires the Council to use alternatives with the minimum economic cost. Presently Bonneville second powerhouse is shut down at great expense to the ratepayers, and we are suggesting that conducting these studies is the most cost-effective way to resolve the fish passage issues related to Bonneville Dam.

ACTIONITEM:1504(32.7)/COEand(32.8)/COE(REJECTED)

Suggested Language: BPA supports the rejections.

ACTIONITEM:1504(42.3)/CBFWC(REJECTED)

Suggested Language: BPA supports the rejection.

TECHNICAL APPENDIX I: COMPLETED ACTIONS

Suggested Language:

<u>Former Program Section Number</u>	<u>Action</u>	<u>Implementing Agency</u>
<u>704(d)(1)</u>	<u>Deschutes River Spawning Gravel Study and Plan</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>Granite Boulder Creek Habitat Improvement Construction Completed</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>Beech Creek Habitat Improvement Construction Completed</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>Canyon Creek Habitat Improvement Construction Completed</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>Lower Umatilla River Channel Modification ✱ Construction Completed</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>Umatilla River Subbasin Restoration Plan Completed</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>✱ Little Fall Creek Fish Passage</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>Trout Creek Riparian Enhancement Coordination</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>Trout Creek Benefit/Cost Analysis Refinements</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>x Upper Mainstem, John Day River Habitat Improvement</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>South Fork John Day River</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>Peavine Creek Habitat Improvement Construction Completed</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>Enloe Dam Passage Feasibility Phase completed</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>Lolo, Crooked Fork, White Sands Creeks Habitat Improvement Construction Completed</u>	<u>Bonneville</u>

<u>704(d)(1)</u>	<u>Eldorado Creek Passage</u> <u>Construction Completed</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>Crooked Fork Creek Passage</u> <u>Construction Completed</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>Crooked River Passage</u> <u>Construction Completed</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>South Fork Salmon River</u> <u>Tributaries</u> <u>Johnson Creek Passage-</u> <u>Construction Completed</u> <u>Boulder Creek Passage-</u> <u>Construction Completed</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>Bear Valley Creek Habitat</u> <u>Improvement</u> <u>Construction in Progress</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>Pole Creek Irrigation Screen</u> <u>Construction Completed</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>Lemhi River Passage</u> <u>Feasibility Completed</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>Panther Creek Passage</u> <u>Feasibility Completed</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>Red River Fish Habitat Improvement</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>Technical Assistance for Fish and</u> <u>Wildlife Program</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>Evaluation and Monitoring Workshop</u>	<u>Bonneville</u>
<u>704(d)(1)</u>	<u>Tumwater/Dryden Environmental</u> <u>Assessment</u>	<u>Bonneville</u>
<u>704(i)(1)</u>	<u>Design and construction of</u> <u>juvenile release and adult</u> <u>collection and holding facilities</u> <u>on the Umatilla Reservation</u>	<u>Bonneville</u>
<u>704(k)(1)</u>	<u>Supplementation Workplan</u>	<u>Bonneville</u>

Discussion:

The measures listed above have been completed and should be added to

"Technical Appendix 1: Completed Actions."